

WHAT IS CLAIMED IS:

1.           A magnetic head comprising:  
              a main pole;  
              one or more auxiliary poles; and  
              coils each composed of a looped thin-film conductor coil, said coils being located on both sides of said main pole in a manner to sandwich said main pole; and  
              wherein said coil located on one side generates different magneto-motive force from that of said coil located on the other side.
2.           A magnetic head as claimed in claim 1, wherein said auxiliary pole is located only on one side of said main pole so that the magneto-motive force of said coil located on the side having no auxiliary pole may be greater than that of said coil located on the side having said auxiliary pole.
3.           A magnetic head as claimed in claim 1, wherein the ratio of the magneto-motive forces of said coils located on respective sides is 1.5 or more.
4.           A magnetic head as claimed in claim 1, wherein the ratio of the magneto-motive forces of said coils located on respective sides is 2.5 or less.
5.           A magnetic head as claimed in claim 1, wherein said auxiliary pole is located only on one side of said main pole so that a value of current applied into said coil located on the side having no auxiliary pole may be greater than a value of current applied

into said coil located on the side having said auxiliary pole.

6. A magnetic head as claimed in claim 5, wherein a ratio of applied current values of said coils located on respective sides is 1.5 or more.

7. A magnetic head as claimed in claim 5, wherein a ratio of applied current values of said coils located on respective sides is 2.5 or less.

8. A magnetic head as claimed in claim 1, wherein said auxiliary pole is located only on one side of said main pole and the number of windings of said coil located on the side having no auxiliary pole is greater than that of said coil located on the side having said auxiliary pole.

9. A magnetic head as claimed in claim 8, wherein a ratio of the number of windings of said coils located on respective sides is 1.5 or more.

10. A magnetic head as claimed in claim 8, wherein a ratio of the number of windings of said coils located on respective sides is 2.5 or less.

11. A magnetic head comprising:  
a main pole;  
one or more auxiliary poles; and  
coils each composed of a looped thin-film conductor coil, said coils being located on both sides of said main pole in a manner to sandwich said main pole; and

wherein said coil located on one side is

caused to generate magneto-motive force for magnetizing said main pole that is asymmetrical to that generated by said coil located on the other side.

12. A magnetic head as claimed in claim 1, wherein a distance between said main pole and said auxiliary pole is twice or less as long as the thickness of each coil located between said main pole and said auxiliary pole.

13. A magnetic head comprising:  
a read and write composite head having;  
said magnetic head claimed in claim 1 being served as a read head, and  
a read head composed of a read element and two shield films located in a manner to sandwich said read element.

14. A magnetic head as claimed in claim 13, wherein an auxiliary pole that is one of the components of said read head is formed integrally with and uses one of said shield films composing said read head.

15. A magnetic head as claimed in claim 13, wherein said read head is located on the opposite side to said auxiliary pole in a manner to sandwich said main pole.

16. A magnetic head as claimed in claim 15, wherein a distance between said main pole and said auxiliary pole is smaller than a distance between said main pole and said shield film closer to said main pole.

17.           A magnetic head comprising:  
              a main pole;  
              auxiliary poles;  
              coils; and  
              said auxiliary poles and said coils being  
located on a trailing side and a leading side in a  
manner to sandwich said main pole, the opposed area of  
one auxiliary pole to a floating surface being made  
smaller than the opposed area of the other auxiliary  
pole to said floating surface, and the magneto-motive  
force of said coil located on the side of said  
auxiliary pole with a smaller area being made greater  
than that of said coil located on the side of said  
auxiliary pole with a larger area.

18.           A magnetic head as claimed in claim 17,  
wherein the current applied to said coil located on  
said auxiliary pole with a smaller area is greater than  
the current applied to said coil located on said  
auxiliary pole with a larger area.

19.           A magnetic head as claimed in claim 17,  
wherein the number of windings located on said  
auxiliary pole with a smaller area is greater than that  
located on said auxiliary pole with a larger area.

20.           A magnetic head comprising:  
              a read and write composite head having;  
              a magnetic head described in claim 17 being  
served as a write head;  
              a read head composed of a read element and

two shield films located in a manner to sandwich said read element; and

said read head being located on the side of said auxiliary pole with a smaller area.